

# **A G E N D A**

## **UTAH BOARD OF WATER RESOURCES**

Department of Natural Resources  
1594 W. North Temple  
Salt Lake City, Utah

November 5, 2004

**1:00 p.m.**

I. CALL TO ORDER

II. APPROVAL OF MINUTES - September 23 & 24, 2004

III. CHAIR'S REPORT

IV. WATER SUPPLY OUTLOOK

Randy Julander

V. FEASIBILITY REPORTS

E147 Santaquin City

E149 Willow Creek Irr. Co.

County

Utah

Sanpete

VI. SPECIAL ITEMS

E154 City of West Jordan

(App. Sum., Feas. Rpt., & Comm. of Funds)

L541 Town of Brian Head (Withdrawal)

Salt Lake

Iron

VII. DAM SAFETY CONSTRUCTION FUNDING

C024 Huntington-Cleveland Irr. Co.

Emery

VIII. DIRECTOR'S REPORT

A. Communities not in compliance with the  
Water Conservation Plan Act

Molly Waters

B. Report on this year's Cloudseeding Program

Todd Adams

VIII. OTHER ITEMS

IX. NEXT BOARD MEETING - December 10, 2004 - Salt Lake City

X. ADJOURNMENT

## **BRIEFING MEETING AGENDA**

### **UTAH BOARD OF WATER RESOURCES**

Department of Natural Resources  
1594 W. North Temple  
Salt Lake City, Utah

November 5, 2004

**9:30 a.m.**

- |      |                                       |                  |
|------|---------------------------------------|------------------|
| I.   | WELCOME/CHAIR'S REPORT                | Chairman Shirley |
| II.  | ACTIONS OF THE WATER STUDY TASK FORCE | Warren Peterson  |
| III. | DISCUSSION OF PROJECTS                | Board/Staff      |
| IV.  | OTHER ITEMS                           |                  |

**BOARD OF WATER RESOURCES**

**Revolving Construction Fund**

**Funding Status**

**November 5, 2004**

Funds Available for Projects This FY \$ 5,439,000

**Projects Contracted This FY**

1 South Willard Water Co (Amend)	E119	90,000
2 Chester Irr Co	E138	48,000

Total Funds Contracted	\$ 138,000
Funds Balance	\$ 5,301,000

**Projects with Funds Committed**

1 Kanab Irr Co	D968	\$ 377,000
2 Deseret Irr Co (Amend)	E101	32,000
3 West Porterville Pipeline Co	E148	27,000
4 Otter Creek Reservoir Co (Amend)	C021	25,000
5 Piute Res & Irr Co (Amend)	C022	25,000
6 Piute Res & Irr Co (Piute Dam)	C022 Grant **	4,180,000
7 Piute Res & Irr Co (Piute Dam)	C022 Loan **	220,000
8 Kays Creek Irr Co (Adams Dam) Amd	C001 Grant **	4,000
* 9 Huntington-Cleveland Irr Co	C024 Grant **	9,000
Commitments for Dam Safety Studies	**	136,000

Total Funds Committed	\$ 5,035,000
Funds Balance	\$ 266,000

**Projects Authorized**

1 Deseret Irr Co	E056	\$ 400,000
2 West Panguitch Irr & Res Co	E105	137,000
3 Hi-Country Estates Homeowners Assn	E127	406,000
4 Leeds Water Co	E132	697,000
5 M&M Irr Co	E136	531,000

Total Funds Authorized	\$ 2,171,000
Remaining Funds Available	\$ (1,905,000)

\* To be presented at Board Meeting

\*\* Dam Safety Projects

**BOARD OF WATER RESOURCES**

**Cities Water Loan Fund**

**Funding Status**

**November 5, 2004**

Funds Available for Projects This FY	\$ 2,368,000
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**Bonds Closed This FY**

Total Bonds Closed	\$ -
Funds Balance	\$ 2,368,000

**Projects with Funds Committed**

1	\$ -
Total Funds Committed	\$ -
Funds Balance	\$ 2,368,000

**Projects Authorized**

1	\$ -
Total Funds Authorized	\$ -
Remaining Funds Available	\$ 2,368,000

\* To be presented at Board Meeting

# BOARD OF WATER RESOURCES

## Conservation & Development Fund

### Funding Status

November 5, 2004

Funds Available for Projects This FY \$ 15,089,000

#### Projects Contracted/Bonds Closed This FY

1 City of St. George (Bond Ins.)	E137	145,000
2 MWD of Salt Lake & Sandy (Bond Ins.)	E134	<u>\$ 500,000</u>

Total Funds Contracted/Closed	<u>\$ 645,000</u>
Funds Balance	<u>\$ 14,444,000</u>

#### Projects with Funds Committed

1 Pleasant Grove City	E126	115,000
2 Lake Creek Irr Co (Ph 1)	E102	22,500
3 Ephraim Irr Co	E061	1,500,000
4 Hooper Irr Co (Press Irr, Phase I amend)	E060	85,000
5 Holliday Water Co	E122	1,500,000
* 6 City of West Jordan (Bond Ins.)	E154	<u>25,000</u>

Total Funds Committed	<u>\$ 3,248,000</u>
Funds Balance	<u>\$ 11,196,000</u>

#### Projects Authorized

1 Strawberry High Line Canal Co	D976	\$ 3,187,000
2 Uintah WCD (Island Ditch)	E036	720,000
3 Richland Nonprofit Water Co	E087	335,000
4 Lake Creek Irr Co (Ph 2)	E102	300,000
5 Tropic & East Fork Irr Co (Ph 2)	E104	220,000
6 West Point City	L546	410,000
7 Centerfield Town	L547	255,000
8 Center Creek Culinary Water Co	E020	877,000
9 New Escalante Irr Co	E077	300,000
10 St George & Washington Canal Co	E129	11,000,000
* 11 Santaquin City	E147	1,000,000
* 12 Willow Creek Irr Co	E149	<u>1,048,000</u>

Total Funds Authorized	<u>\$ 19,652,000</u>
Remaining Funds Available	<u>\$ (8,456,000)</u>

\* To be presented at Board Meeting

# BOARD OF WATER RESOURCES

November 5, 2004

ADDITIONAL ACTIVE PROJECTS			Fund	Est. Board Cost	Total Cost
<b>Authorized or Committed Projects</b>					
1 Davis & Weber Counties Cnl Co (Ph 4)	D674	C&D		\$ 10,379,000	\$ 12,211,000
2 Central Utah WCD (Prepay FY98,99,00)	D960	C&D		3,000,000	3,000,000
3 Weber Basin WCD (Secondary Irr, Ph 3-5)	E029	C&D		27,721,000	32,613,000
4 Davis & Weber Counties Cnl Co(Cnl Rehab)	E035	C&D		15,497,000	18,232,000
5 Hooper Irr Co (Press Irr, Ph 2-4)	E060	C&D		11,772,000	13,850,000
6 City of Cedar Hills	E099	C&D		31,200	31,200
Subtotal				\$ 68,400,200	\$ 79,937,200
<b>Projects Under Investigation</b>					
1 Keith Johnson	D996	RCF		\$ 37,500	\$ 50,000
2 Mayfield Irr Co	E067	RCF		187,500	250,000
3 Rock Dam Irr Co	E083	RCF		37,500	50,000
4 Mower Ditch Co	E133	RCF		135,000	180,000
5 Downs Ditch Water Co	E139	RCF		281,250	375,000
6 Co-Op Farm Irr Co	E140	RCF		374,250	499,000
7 Anderson, Felt, Winters Ditch Co	E141	RCF		148,500	198,000
8 Felt, Peterson, Slater Ditch Co	E142	RCF		148,500	198,000
9 Huntsville South Bench Canal Co	E143	RCF		258,750	345,000
10 Emmertsen Irr Co	E144	RCF		86,250	115,000
11 Huntsville Irr Co	E146	RCF		627,000	836,000
12 Cedar Creek Irr Co	E152	RCF		337,500	450,000
13 Parowan City	E121	CWL		158,250	211,000
* 14 Millville City	L548	CWL		1,275,000	1,700,000
15 Woodruff Irrigating Co	D680	C&D		600,000	800,000
16 Kane County WCD	D828	C&D		1,500,000	2,000,000
17 Uintah WCD (Leota Bench)	D944	C&D		750,000	1,000,000
18 Gunnison Butte Mutual Irr Co	E004	C&D		10,500,000	14,000,000
19 City of South Jordan ( Secondary Irr)	E034	C&D		2,253,000	3,004,000
20 Hyrum Blacksmith Fork Irr Co	E047	C&D		1,230,000	1,640,000
21 East Juab County WCD	E071	C&D		375,000	500,000
22 Ferron Canal & Res Co	E082	C&D		2,625,000	3,500,000
23 Whiterocks Irr Co	E084	C&D		1,500,000	2,000,000
24 Logan, Hyde Park, Smithfield Canal Co	E096	C&D		1,301,250	1,735,000
25 Newton Water Users Association	E100	C&D		1,001,250	1,335,000
26 Town of Goshen	E109	C&D		240,000	320,000
27 Weber-Box Elder Conservation Dist	E113	C&D		9,750,000	13,000,000
28 Cottonwood Creek Consolidated Irr Co	E125	C&D		3,750,000	5,000,000
29 Alton Farmers Assoc	E128	C&D		1,650,000	2,200,000
30 Huntington-Cleveland Irr Co	E130	C&D		21,299,000	66,090,000
31 Fremont Irr Co	E131	C&D		1,500,000	2,000,000
32 Ashley Valley Res Co	E145	C&D		1,425,000	1,900,000
33 Grantsville Irr Co	E150	C&D		321,000	428,000
Subtotal				\$ 67,663,250	\$ 127,909,000
TOTAL				\$ 136,063,450	\$ 207,846,200

\* New Applications

## BOARD OF WATER RESOURCES

November 5, 2004

### INACTIVE PROJECTS

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#### Long Term Large Water Conservation Projects

1 Sanpete WCD (Narrows Dam)	D377
2 Wayne County WCD	D494
3 Cedar City Valley Water Users	D584
4 Bear River WCD	D738
5 Upper Sevier River WCD	E098

BOARD OF WATER RESOURCES

Feasibility Report

Conservation and Development Fund

Appl. No.: **E-147**  
Received: 5/28/04  
Approved: 7/9/04

To be Presented at the November 5, 2004 Board Meeting

SPONSOR: **SANTAQUIN CITY**

Mayor: A. LaDue Scovill

LOCATION: The proposed project is located in and around Santaquin, about 20 miles south of Provo in Utah County.

EXISTING CONDITIONS & PROBLEMS: Santaquin currently supplies culinary water from springs and wells to 1,810 connections, most of which use it both inside and outside. Due to the city's rapid growth rate the past 15 years (7.3% annually), the culinary system runs at capacity in the summer.

The city passed an ordinance this past summer requiring all new developments to have pressurized irrigation pipelines installed. In addition, developers are required to transfer to the city three acre-feet of water per acre approved for development; they have been meeting this requirement by purchasing stock in the local Summit Creek Irrigation Company, increasing the city's ownership to about 300 shares (15% of total). The city lacks the full infrastructure necessary to use this water, however, so it currently leases it to other company shareholders.

This past year the city spent \$200,000 for a feasibility study of a secondary irrigation system and installation of secondary irrigation pipeline.

PROPOSED PROJECT: Santaquin is requesting financial assistance from the board to install a pressurized secondary irrigation system within the city limits. The project will



initially serve about 1,570 connections and include 37 miles of transmission and distribution pipeline, two regulating ponds, a pump station, pressure regulating stations, and a telemetry system. Staff suggests the city also install 25 water meters to be used on a trial basis to assess their workability in the system. Technical assistance is being provided by J-U-B Engineers in Orem.

The system will require the city's 300 irrigation company shares plus purchase of an additional 300 shares.

The project fits in Prioritization Category 2 (municipal project required to meet existing or impending need).

COST ESTIMATE: The following cost estimate is based on the engineer's preliminary design and has been revised by staff:

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Amount</u>
1.	Ductile Iron Pipe, Fittings, & Valves			
	a. 24-inch	10,500 LF	\$76.00	\$ 798,000
	b. 16-inch	4,000 LF	37.00	148,000
2.	PVC Pipe (C-900), Fittings, & Valves			
	a. 12-inch	6,000 LF	28.00	168,000
	b. 10-inch	20,000 LF	22.00	440,000
	c. 8-inch	13,000 LF	18.00	234,000
	d. 6-inch	140,000 LF	13.50	1,890,000
3.	Pipe Embedment	56,000 TN	7.00	392,000
4.	Final Backfill	11,000 TN	8.00	88,000
5.	Road Base	18,000 TN	8.00	144,000
6.	Asphalt Repair	350,000 SF	1.80	630,000
7.	Highway Crossing			
	a. I-15	320 LF	80.00	25,600
	b. SR 6	270 LF	80.00	21,600
8.	Regulating Pond			
	a. Upper	LS	400,000	400,000
	b. Lower	LS	1,000,000	1,000,000
9.	Pump Station	LS	100,000	100,000
10.	Pressure Regulating Station	6 EA	12,500	75,000
11.	Telemetry System	LS	50,000	50,000
12.	Service Connection			

a. Regular	1,545 EA	500	772,500
b. Water Meter	25 EA	1,000	<u>25,000</u>
Construction Cost			\$ 7,401,700
Contingencies			738,300
Legal and Administrative			160,000
Design and Construction Engineering			800,000
Land Purchase			500,000
Water Shares Purchase			600,000
Prior Construction by City			<u>200,000</u>
TOTAL			\$10,400,000

COST SHARING  
& REPAYMENT:

The recommended cost sharing and repayment are:

<u>Agency</u>	<u>Cost Sharing</u>	<u>% of Total</u>
Market Loan	\$ 3,600,000	34.6%
Board of Water Resources	1,000,000	9.6
Sponsor	800,000	7.7
CUWCD Grant	<u>5,000,000</u>	<u>48.1</u>
TOTAL	\$10,400,000	100%

The city's cost sharing equals the value of pressurized irrigation facilities already constructed, plus purchase of additional irrigation company shares.

If the board authorizes the project, it is suggested the board participate in an interest rate buydown with the city. The market loan would be repaid in 25 years at about 4.93% interest for the first ten years, and 5.5% for the last 15 years with approximate annual payments of \$291,000. The \$1,000,000 bonded indebtedness to the board would be repaid concurrently in 25 years at 3.0% interest with approximate annual payments as follows (includes reserves):

<u>Years</u>	<u>Annual Payment</u>
1	\$50,000
2	53,000
3	56,000
4	59,000
5-24	62,000
25	65,000±

ECONOMIC  
FEASIBILITY:

The proposed project is economically feasible if the cost of the best alternative to it exceeds the proposed project costs. The best alternative project is to expand the existing culinary system main lines, add more storage, and construct a treatment plant to treat water from an irrigation canal; treatment facilities would have to be expanded twice during the evaluation period. An annual population growth rate of 3.5% was used for the 50-year project life.

All capital and operation costs for both the proposed secondary system and expansion of the existing culinary system were discounted to present worth to calculate the benefit of the proposed project. When the cost of expanding the capacity of the culinary system is adopted as a measure of benefits, the benefit/cost ratio for the secondary system is 1.67.

FINANCIAL  
FEASIBILITY:

Based on the board's water service affordability guidelines, Santaquin residents could pay up to \$40.83 monthly for all water; they presently pay an average of \$26.00. The cost of water with the proposed project, based on 1,660 projected system connections when the first annual payment is due in 2007, is as follows:

	<u>Annual Cost</u>	<u>Cost/Conn/Mo</u>
Existing Culinary Water	\$373,000	\$18.72
New Secondary O&M	41,000	2.06
City's Cost Sharing	59,000	2.96
Proposed BWRe Loan	50,000	2.51
Market Loan	<u>291,000</u>	<u>14.61</u>
TOTAL	\$814,000	\$40.86

The city has summer and winter culinary water rate schedules. Summer monthly rates are \$16.95 for the first 8,000 gallons, \$0.75 per thousand gallons to 50,000 gallons, \$1.10 per thousand to 100,000, \$1.25 per thousand to 150,000, and \$1.50 per thousand above that. Winter monthly rates are \$16.95 for the first 10,000 gallons, and \$0.75 per thousand gallons above that. Rates for the ten connections outside city limits are double those inside. The city will eliminate its winter rates and adopt a more progressive culinary rate schedule once the project is functional.

The proposed pressurized irrigation rate structure is:

<u>Lot Size (acres)</u>	<u>Monthly Cost`</u>
1/4 and smaller	\$16.00
1/4 to 1/2	22.00
1/2 to 3/4	30.00
3/4 to 1	40.00
1 to 1 1/2	50.00
1 1/2 to 2	60.00

The proposed connection fee is \$200 at time of construction, and \$2,000 afterward.

**BENEFITS:** The proposed project will allow the city to meet culinary water demands through 2026, and improve system pressures.

**PROJECT SPONSOR:** Santaquin City was incorporated in 1890, has a current population of approximately 6,700, and grew at an average annual rate of 7.3% from 1990 to the present. The city projects an average annual population growth rate of about 6% the next ten years, then about 4% through buildout.

Santaquin received \$158,000 from the board in the mid-1980s, and \$765,000 in the early 1990s, to help make culinary system improvements. The first loan is paid off and the second will be paid off in 2009.

**WATER RIGHTS & SUPPLY:** The city plans to tie two of its existing wells into the proposed secondary irrigation system. It also owns 300 shares of stock in Summit Creek Irrigation Company and will need to acquire an additional 300 shares to make the system completely operational.

The city's municipal water rights are:

<u>Source</u>	<u>Right No.</u>	<u>Quantity</u>
Summit Creek & Springs	51-1013	2.0 cfs
Springs & Well	51-1347	2.52 cfs
	a9506	
Well	51-1348	2.48 cfs
	a16256	
Utah Lake	51-7045	224.8 ac-ft
	a26290	
Wells	51-7330	80.0 ac-ft
	a23771	
Utah Lake	53-1496	807.4 ac-ft
	a25719	

EASEMENTS:	Easements and permits will be obtained from the U.S. Forest Service, Utah County, Utah Department of Transportation, and private property owners. Approximately ten acres will be purchased for construction of the regulating ponds.	
ENVIRONMENTAL:	Some destruction of natural habitat will occur at the pond sites and along portions of the pipeline rights-of-way.	
WATER CONSERVATION:	As conditions of board funding, the city will be required to adopt an ordinance prohibiting pressurized irrigation of landscapes between the hours of 10:00 a.m. and 6:00 p.m., and update its water management and conservation plan.	
SPONSOR'S RESPONSIBILITIES:	The city will be required to make all arrangements to sell the board a non-voted revenue bond as well as verify it has adequate water rights and rights-of-way to construct the project. If the project is authorized, a list of requirements and procedures necessary to close the loan will be furnished to the city.	
PROJECT CONTACT PEOPLE:	Mayor:	A. LaDue Scovill 45 West 100 South Santaquin, UT 84655 Phone: (801) 754-3211
	City Manager:	Stefan Chatwin 45 West 100 South Santaquin, UT 84655 Phone: (801) 754-3211
	Engineer:	J-U-B Engineers 240 W. Center Street, #200 Orem, UT 84057 Phone: (801) 226-0393



**SANTAQUIN CITY**  
Secondary Irrigation Project  
Utah County

**Proposed Pipelines**

- 6" (Red dashed line)
- 8" (Blue dashed line)
- 10" (Green dashed line)
- 12" (Yellow dashed line)
- 16" (Cyan dashed line)
- 24" (Purple dashed line)

**Existing Diversion Structure**

- Blue triangle

**Tie to existing Wells**

- Red square

**Proposed Ponds**

- Red circle

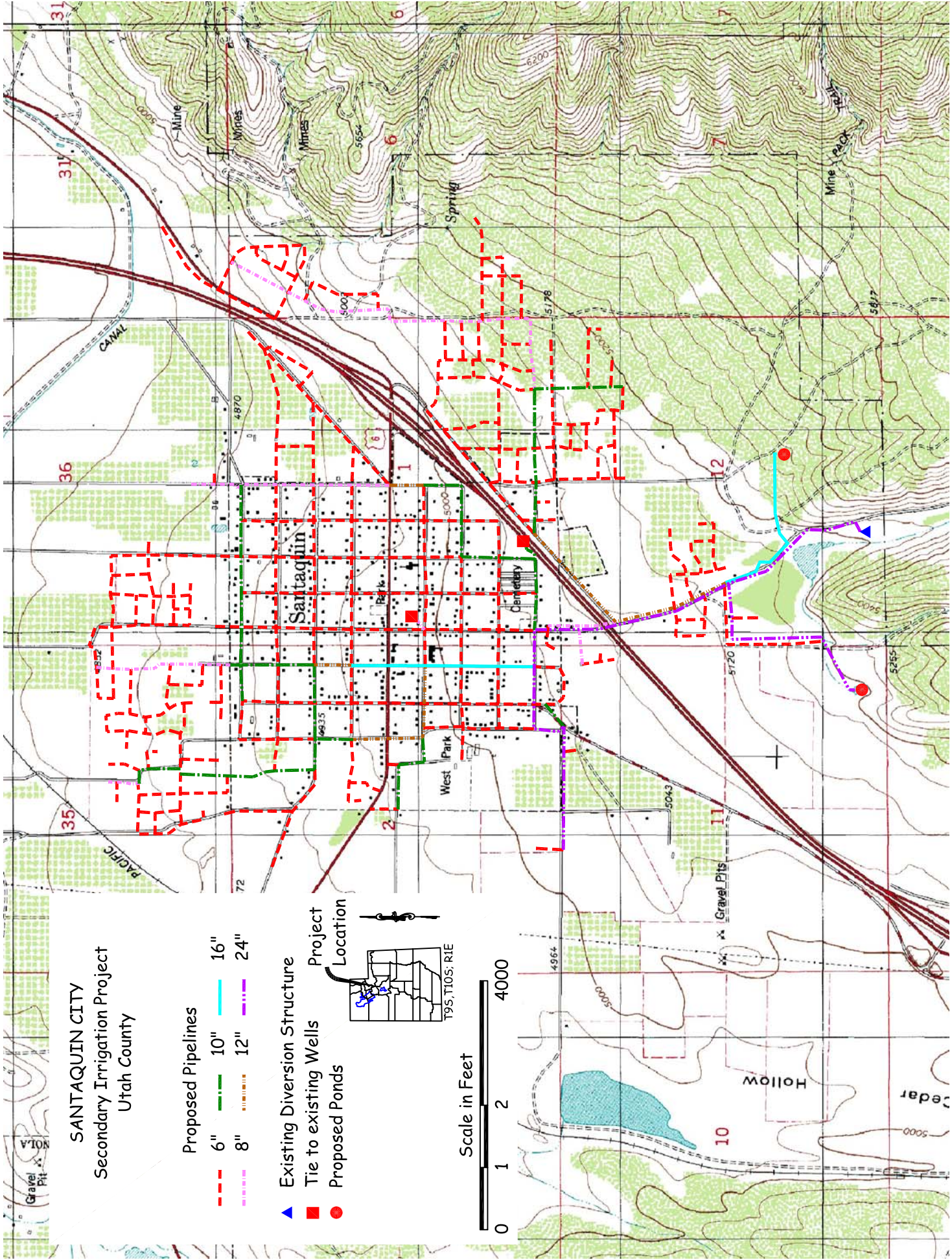
**Project Location**

Scale in Feet: 0, 1, 2, 4000

Inset Map: T9S, T10S, R1E

Line Style	Line Color	Line Width	Line Spacing
6"	Red	6"	6"
8"	Pink	8"	8"
10"	Green	10"	10"
12"	Brown	12"	12"
16"	Cyan	16"	16"
24"	Purple	24"	24"

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BOARD OF WATER RESOURCES

Feasibility Report

Conservation and Development Fund

Appl. No.: **E-149**  
Received: 7/2/04  
Approved: 8/13/04  
Tabled: 9/24/04

To be Presented at the November 5, 2004 Board Meeting

SPONSOR: **WILLOW CREEK IRRIGATION COMPANY**

President: Quay Mecham

LOCATION: The proposed project is located in and around the unincorporated community of Axtell, about eight miles south of Gunnison in Sanpete County.

EXISTING CONDITIONS & PROBLEMS: The sponsor currently delivers ditch irrigation water to about 790 agricultural acres. Although it has also delivered ditch water for 88 homes' (5-10 acres) lawns and gardens, many residents today use culinary water (supplied by Axtell Community Special Service District) outdoors instead. Irrigation water is supplied from Willow Creek and Michaelson Springs; the springs are also Axtell's culinary water source. As the drought has continued and spring production has decreased, water restrictions have been implemented. The diminished culinary supply is also a concern where future housing construction is concerned.

The concrete-lined transmission ditch carrying diverted Willow Creek water down the canyon to places of use is deteriorated and requires constant maintenance.

PROPOSED PROJECT: The sponsor is requesting financial assistance from the board to construct a pressurized irrigation system to serve 1,200 acres (allowed under water right) of farmland, Axtell's existing 88 homes, and 29 additional homes projected to be constructed in the next 25 years. The project will include three



miles of pipeline to transport irrigation water down the canyon, a 20-acre-foot regulating pond, and about eight miles of distribution pipeline. Engineering services will be provided by Franson Noble Engineering in American Fork.

COST ESTIMATE: The following cost estimate is based on the engineer's preliminary design and has been reviewed by staff:

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit</u> <u>Price</u>	<u>Amount</u>
1.	Mobilization	LS	\$50,000	\$ 50,000
2.	Regulating Pond	LS	135,000	135,000
3.	PVC Pipe			
	a. 21-inch	29,500 LF	18.00	531,000
	b. 18-inch	5,000 LF	14.00	70,000
	c. 8-inch	17,900 LF	6.00	107,400
	d. 4-inch	4,000 LF	5.00	20,000
4.	Highway Crossing	LS	10,000	10,000
5.	Valves & Fittings	LS	45,000	45,000
Construction Cost				\$ 968,400
Contingencies				96,600
Legal and Administrative				22,000
Design and Construction Engineering				146,000
TOTAL				\$1,233,000

COST SHARING & REPAYMENT: The recommended cost sharing and repayment are:

<u>Agency</u>	<u>Cost Sharing</u>	<u>% of Total</u>
Board of Water Resources	\$1,048,000	85%
Sponsor	185,000	15
TOTAL	\$1,233,000	100%

If the board authorizes the project, it is suggested it be purchased in 25 years at 1% interest with annual payments ranging from approximately \$45,100 to \$50,600.

ECONOMIC FEASIBILITY: Benefits to farm irrigators are estimated as the increase in net income from improved water conveyance efficiency gained by installation of the proposed canyon transmission pipeline, and improved on-farm irrigation efficiency. With farmers' net incomes to increase by approximately \$59,400, the benefit/cost ratio of the farm irrigation portion of the project is 1.39.



In order to measure benefits for the municipal part of the project, it is necessary to identify the next best alternative that will deliver the same service to the sponsor, and estimate its cost. The alternative considered in this analysis is to increase the water supply for Axtell's culinary water system by purchasing an additional 100 shares of water from Gunnison Irrigation Company. Although the capacity of Axtell Community Special Service District's storage and delivery system is currently adequate to provide basic day-to-day service, it does not meet fire flow standards and state peak day capacity requirements. The cost to upgrade the district's system to meet these standards is estimated to be \$510,200.

Based on conversations with the sponsor's engineer, the cost to acquire the needed water rights/shares is \$175,000; the total cost of the alternative is therefore \$685,200. The benefit/cost ratio for the secondary system portion of the project is 1.09, and for the combined project 1.27 when all costs are discounted to present value over 50 years.

FINANCIAL  
FEASIBILITY:

Based on the board's water service affordability guidelines, municipal users could pay up to \$23.33 monthly for all water. The cost of municipal water with the proposed project, based on 88 existing connections and an annual growth rate of 1.13% projected by the state Office of Planning and Budget, is as follows:

	<u>Annual Cost</u>	<u>Cost/Conn/Mo</u>
Operation & Maintenance	\$12,500-16,741	\$11.83
Ann. Pymt. to BWRe	<u>12,150-15,900</u>	<u>11.50</u>
TOTAL	\$24,650-32,641	\$23.33

Agricultural benefits from installing the project consist of increased crop production, plus reduced operation and maintenance costs:

Annual Benefit of Increased Crop Production	\$59,400
Annual Cost Reduction of Ditch O&M	8,000
Less Annual Cost of Sprinkler Equipment (\$150/acre for 1,200 acres @ 10%* interest over 10 years)	<u>-29,300</u>
ANNUAL NET BENEFIT	\$38,100

\* Rate obtained from Utah Farm Bureau

With the proposed board share of the project being 85%, it is suggested farmers' repayment ability be calculated as approximately 85% of the annual net benefit, or \$32,400 per year.

The per acre cost of sprinkler equipment shown is the net cost to farmers; half the \$300 total is expected to be paid by an Environmental Quality Incentive Program grant from the Natural Resources Conservation Service.

The proposed municipal portion of annual payments to the board, plus agricultural repayment ability, nearly equals total proposed annual payments. The sponsor proposes to make up any shortfall through district-charged impact fees and culinary water rate increases.

BENEFITS:

The proposed project will increase irrigation efficiency and crop production, allow more of the adjudicated acreage to be irrigated when water is in short supply, and reduce maintenance costs. Culinary water use on lawns and gardens will be severely reduced, making an estimated 44 acre-feet available annually to support existing and future homes.

PROJECT  
SPONSOR:

The Willow Creek Irrigation Company was created in the late 1800s to serve irrigation water from Willow Creek to the Axtell area, and has an "Expired" status with the state Department of Commerce. Company stock consists of 1,600 shares currently used to irrigate about 800 acres; 400 acres are idle. It also supplies culinary water to Axtell Community Special Service District for use in 88 homes.

The irrigation company has received assistance from the board twice in the past. In the late 1960s the board provided \$30,000 to concrete-line about nine miles of canal, install 800 feet of low-head pipe, and make other irrigation system improvements. In the early 1980s the board provided about \$34,000 to repair flood damage to a diversion structure and canal. Both projects have been paid off.

WATER RIGHTS  
& SUPPLY:

The sponsor's water rights are:

<u>WRNUM</u>	<u>Source</u>	<u>Flow/Storage</u>
63-2829	Willow Creek	47 cfs
	Willow Creek Reservoir	851.6 acre-feet
63-1002	Michaelson Springs	0.5 cfs

The creek flows up to 15 cfs in the spring and as low as 1 cfs in the fall.

The Axtell Community Special Service District has a perpetual agreement with the sponsor to allow up to 0.5 cfs to be diverted into Axtell's culinary system, which is more than adequate to supply current and future indoor needs. Any spring water not used by the district goes into the sponsor's irrigation system.

EASEMENTS:

Pipeline easements will be minimized as they use many existing ditches.

The regulating pond site is owned by a company stockholder who is negotiating a turnout from the canyon pipeline in exchange for the site.

ENVIRONMENTAL:

Some water in the canyon that wildlife presently has access to will no longer be available.

WATER  
CONSERVATION:

Piping the canyon ditch will eliminate the 20% water loss currently occurring from seepage, evaporation, and washouts. Piping earthen ditches will eliminate the 30% loss from seepage and evaporation.

SPONSOR'S

RESPONSIBILITIES: If the board authorizes the proposed project, the sponsor must do the following before construction can begin:

1. Become registered in good standing with the state Department of Commerce.
2. Obtain stream alteration permits from the State Engineer.
3. Obtain all easements, rights-of-way, and permits required to construct, operate, and maintain the project.
4. Pass a resolution by the appropriate (as defined in the company's Articles of Incorporation and Bylaws) majority of company stock authorizing its officers to do the following:

- a. Assign properties, easements, and water rights required for the project to the Board of Water Resources.
  - b. Enter into a contract with the Board of Water Resources for construction of the project and subsequent purchase from the Board.
- 5. Have an attorney give the Board of Water Resources a written legal opinion that:
  - a. The company is legally incorporated for at least the term of the purchase contract and is in good standing with the state Department of Commerce.
  - b. The company has legally passed the above resolution in accordance with the requirements of state law and the company's Articles of Incorporation and Bylaws.
  - c. The company has obtained all permits required for the project.
- 6. Have an attorney give the Board of Water Resources a written legal opinion that:
  - a. The company owns all easements and rights-of-way for the project, as well as the land on which the project is located, and that title to these easements, rights-of-way, and the project itself can be legally transferred to the Board.
  - b. The company's water rights applicable to the project are unencumbered and legally transferable to the Board of Water Resources, and that they cover the land to be irrigated by the project.

In lieu of an attorney's opinion, the company may obtain a title insurance policy in the name of the Board of Water Resources for the easements, rights-of-way, land, and water rights necessary for the project.

- 7. Obtain approval of final plans and specifications from the Division of Water Resources.

8. Obtain approval of final plans and specifications for the regulating pond from the Division of Water Rights.

9. Notify the Division of Drinking Water of the Axtell community portion of the project and provide it opportunity to comment.

10. Provide the Division of Water Resources a copy of an agreement with Axtell Community Special Service District guaranteeing its portion of annual payments to the board.

11. Prepare a water management and conservation plan for its service area, and obtain approval of it from the Division of Water Resources.

12. Adopt a rule prohibiting its municipal water users from irrigating landscapes between the hours of 10:00 a.m. and 6:00 p.m.

13. Obtain an IRS Employer Identification Number.

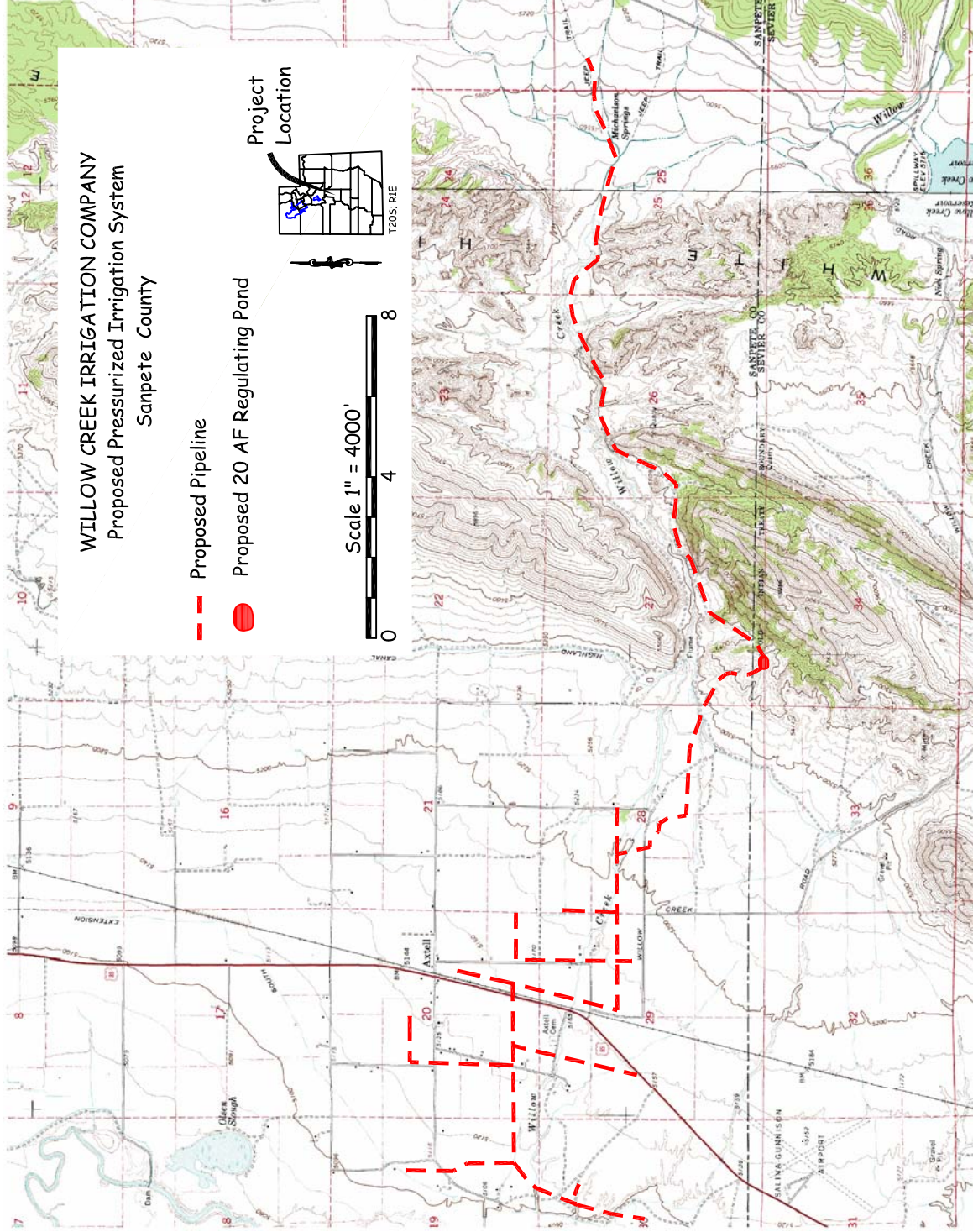
PROJECT  
CONTACT  
PEOPLE:

President: Quay Mecham  
22 North 200 East  
Axtell, UT 84621  
Phone: (435) 528-7526 (h)  
(435) 286-4880 (w)

Secretary: Karl Humphrey  
Box 33  
Axtell, UT 84621  
Phone: (435) 528-3765

President of  
Axtell Community SSD Travis Blackburn  
265 West Center  
Axtell, UT 84621  
Phone: (435) 528-3803

Engineer: Franson Noble Engineering  
1276 South 820 East, Suite 100  
American Fork, UT 84033  
Phone: (801) 756-0309



BOARD OF WATER RESOURCES

Special Item

Application Summary, Feasibility Report, and Committal of Funds

Conservation and Development Fund

Appl. No.: **E-154**

Received: 10/4/04

To be Presented at the November 5, 2004 Board Meeting

SPONSOR: **CITY OF WEST JORDAN**

Mayor: Bryan Holladay  
8000 S. Redwood Road  
West Jordan, UT 84088  
Phone: (801) 569-5100

LOCATION: West Jordan is approximately 11 miles south of Salt Lake City in Salt Lake County.

SUMMARY: The City of West Jordan was incorporated in 1941 and is a residential community with an estimated population of 92,000; the population has more than doubled since 1988 and the city's Web page states: "The City of West Jordan is fortunate to have a lion's share of the vacant land left for future growth within Salt Lake County. This available land and Utah's strong economy will ensure a continued rapid rate of growth for the City of West Jordan."

The city plans to issue one series of bonds for \$2.6 million to fund the installation of radio-read water meters. Meter readers are currently required to walk house to house, open each meter, clean off the display, and manually read it. The new meters allow readers to drive a vehicle with a laptop computer inside which reads the meters via radio frequency as they are passed; about 20 meters can be read with this system in the time it takes to read one manually. The city has to date installed radio-read water meters on approximately 25% of the homes and buildings within city boundaries, and desires to install these meters on the remaining 75%.

Installation of the new meters will also assist the city in its water conservation efforts. It currently bills monthly during the summer irrigation season, and having accurate, consistent water bills with water usage is an important part of the city's water conservation and management plan.

REQUEST: The city is requesting the board provide a grant of \$25,000 to purchase bond insurance. The insurance will reduce the interest rate about 0.5% and save the city approximately \$80,000 in interest payments over the bond's 12-year repayment period.

ECONOMIC  
FEASIBILITY: The benefit/cost ratio is assumed to be 1.0.



BOARD OF WATER RESOURCES

Special Item

Withdrawal

Conservation and Development Fund

Appl. No.: **L-541**  
Received: 5/14/01  
Approved: 6/8/01  
Authorized: 1/25/02  
Committed: 3/20/03

To be Presented at the November 5, 2004 Board Meeting

SPONSOR: **TOWN OF BRIAN HEAD**

Mayor: H. C. (Dutch) Deutschlander  
P.O. Box 190068  
Brian Head, UT 84719  
Phone: (435) 677-2029

LOCATION: The project is located in Brian Head, about nine miles south of Parowan in Iron County.

SUMMARY: The board committed \$1,700,000 (85%) to the sponsor to help upgrade and improve its culinary water system by redeveloping several springs, reequipping a major well, replacing small and leaky pipes, installing new pipelines, renovating existing pressure regulating stations and installing new ones, adding automated chlorination stations, and installing a radio telemetry system.

The sponsor received a lower interest rate on the open market, has completed the project, and does not need board funding. Staff therefore recommends the sponsor's application be decommitted and withdrawn from further consideration.

BOARD OF WATER RESOURCES

Dam Safety Report

Construction Funding

Request for Additional Funds

Appl. No.: **C-024**

Committed: 9/19/97

Amended: 12/12/97

To be Presented at the November 5, 2004 Board Meeting

SPONSOR: **HUNTINGTON-CLEVELAND IRRIGATION COMPANY**

President: Dennis Ward  
71 North Main  
Huntington, UT 84528  
Phone: (435) 687-9584

LOCATION: Huntington Dam is located about 25 miles northwest of Huntington in Sanpete County.

SUMMARY: The sponsor currently delivers water for furrow and flood irrigation through 215 miles of canals and ditches to about 16,000 acres of farmland, pressurized lawn and garden water to 923 homes, and water for a PacifiCorp power plant. Water is supplied from the direct flows of Huntington Creek and from storage in several reservoirs, including Huntington Reservoir.

The 55-foot high Huntington Dam impounds a reservoir of about 5,600 acre-feet capacity. The dam was repaired and raised by 22 feet in the late 1980s, and in 1997 the board approved a grant of \$168,300 and loan of \$18,700 to upgrade the dam to meet current state dam safety standards.

At the State Engineer's inspection of the dam this fall, it was determined that the pipe downstream of the dam outlet structure had failed at its connection to the energy dissipater box, and although no

immediate danger exists, water cannot be released until the problem is repaired.

In consultation with the State Engineer's Office it has been determined the failure is a result of the dam safety repairs and is eligible for dam safety funds. The estimated cost is \$10,000. The division will prepare plans and specifications and supervise construction.

COST SHARING: The board approved the previous dam safety work at 90% grant, 10% loan. Staff recommends the board grant the company 90% of the cost of making the current repair, up to \$9,000. The company will provide its share of the cost by doing the work.

BOARD OF WATER RESOURCES

Application Summary

Appl. No. **L-548**

Received: 9/22/04

SPONSOR: **MILLVILLE CITY**

Mayor:

Mike Johnson

435 North 200 East

Millville, UT 84326

Phone: (435) 752-5760

LOCATION: The proposed project is located in Millville City,  
about four miles south of Logan in Cache County.

PROPOSED PROJECT: The city is requesting assistance to improve its  
culinary water system by constructing a storage tank  
and installing distribution pipelines, pressure  
regulating stations, and a pumping station.

WATER RIGHTS: Garr Spring: 25-3069, 3510, 5170, and 8394  
Skinner Spring: 25-8105  
Glenridge & Park Wells: 25-5171

COST ESTIMATE: \$1,700,000

BOARD OF WATER RESOURCES

Application Summary

Appl. No. ***E-155***

Received: 10/28/04

SPONSOR: ***CENTERVILLE CITY***

Mayor:

Michael L. Deamer

250 North Main

Centerville, UT 84014

Phone: (801) 295-3477

LOCATION: The proposed project is located in Centerville in Davis County.

PROPOSED PROJECT: The city is requesting assistance to install a pressurized secondary irrigation system in the 73-home Chase Lane West Subdivision, which is surrounded by areas that have a secondary system supplied by Weber Basin Water Conservancy District.

WATER RIGHTS: Project water will be supplied by Weber Basin WCD.

COST ESTIMATE: \$176,000

Board of Water Resources  
Tour of Garfield County  
9/23/04

Attendees:

Larry Anderson, Director  
Dennis Strong, Deputy Director  
Connie Strong  
Eric Millis, Asst. Director  
Lynn Millis  
Steve Wilde, Chief, Investigations  
Laura Wilde  
Tom Cox, Engineer  
Marisa Egbert, Engineer  
Ben Everitt, Geologist  
Randy Staker, Accountant  
Geralee Murdock, Administrative Secretary  
Sherm Hoskins, Deputy Director, Department of Natural Resources  
Marsha Hoskins  
Brian Allred, Legislative Analyst  
Terrah DeGiulio, Gov. Office of Planning and Budget  
Harold and Diane Shirley  
Ivan and Marlene Flint  
Paul and Judy McPherson  
Paul and Dorothy Riley  
Brad Hancock  
Bill Marcovecchio  
Allen Henrie – City Manager, Panguitch City

At 8:00 a.m. the Board Members and Staff along with Panguitch City Manager, Allen Henrie, left Ruby's Inn at Bryce, Utah, traveling in three vans to Escalante. From Escalante the vans traveled over Hells Backbone where they stopped at a bridge and enjoyed the beautiful scenery. From there they traveled to Boulder. At Boulder the group enjoyed a break at the Anasazi State Park Museum and Mike Nelson, Park Manager talked about the Anasazi ruins after which the Board and staff spent time looking at the ruins. The group then boarded the vans and traveled down the Burr Trail a short distance. The group then traveled back to Escalante and stopped at the Wide Hollow State Park where the New Escalante Irrigation Company provided lunch.

Louise Liston, a former county commissioner, then expressed gratitude to the Board and staff for their interest and help. She said the Wide Hollow Dam reservoir is 50% silted in and a new reservoir is needed to preserve the agricultural future of the valley. Eleven years ago they started pursuing different ways to improve the reservoir, and concluded a new reservoir site was the most viable solution. Site #4 was selected and in five years the cost of the dam has risen from \$5 million to \$9 million. The Wide Hollow Conservancy District has therefore, contacted Senator Bennett's office to solicit federal funds. The congressional committee has indicated the district could receive \$2 million this year and another \$2 million in 2006 from the EPA budget. She said they are waiting for a finalization of the EPA budget and for a decision from the IBLA on a challenge to the BLM's special use permit.

Bartt Carter of the irrigation company then had everyone drive to the Wide Hollow dam site #4. Tom Cox showed everyone where the dam is proposed to be built. Director Anderson said the staff and Board support the idea and would like to see the dam built, however at this time their hands are tied until federal funds are secured. He then thanked the irrigation company and the district for their hospitality in providing the delicious lunch and briefing them on the progress of their proposed project.

The group then returned to Ruby's Inn to attend the Briefing meeting.

*Unapproved*  
MINUTES OF THE  
BOARD OF WATER RESOURCES  
BRIEFING MEETING  
September 23, 2004

Manzarita Room  
Ruby's Inn  
Bryce, Utah



MINUTES OF THE  
BOARD OF WATER RESOURCES  
BRIEFING MEETING  
September 23, 2004

The Board of Water Resources held a Briefing Meeting on September 23, 2004 at 4:00 p.m. in the Manzarita Room at Ruby's Inn, Bryce, Utah.

The following were in attendance:

BOARD OF WATER RESOURCES

Harold Shirley  
Ivan Flint  
Bill Marcovecchio  
Paul McPherson  
Brad Hancock  
Paul Riley

STAFF MEMBERS:

D. Larry Anderson, Director  
Dennis Strong, Deputy Director  
Eric Millis, Asst. Director  
Steve Wilde, Chief Investigations  
Geralee Murdock, Administrative Secretary

OTHERS PRESENT:

Sherm Hoskins, Deputy Director, Department of Natural Resources

Board Chair, Harold Shirley, welcomed everyone to the meeting.

### Discussion of the Projects

#### M & M Irrigation Company

Chair Shirley said the irrigation company wants to replace 7 ½ miles of meandering canal with 4 ½ miles of straight pipe. There is also a liability risk as homes are being built below the canal. He said staff has recommended a 10 year repayment period and the irrigation company would like to have 20 years. Director Anderson recommended a compromise of four years at their present repayment of \$27,000 and then ten years at the higher rate when their present repayment is paid off. Paul McPherson said it was a good project and would save a lot of water.

#### Willow Creek Irrigation Company

Steve Wilde said the Willow Creek Irrigation Company owns the spring that provides drinking water to Axtell. Willow Creek delivers irrigation water to 800 acres. Many residents are using the culinary water (supplied by Axtell Special Service District) to water outdoors. The sponsor is requesting financial assistance to construct a pressurized irrigation system to serve 1,200 acres of farmland, Axtell's existing 88 homes, and 29 additional homes are projected to be constructed in the next 25 years. The benefit/cost ratio of the farm irrigation portion of the project is 1.12, the secondary system of the project is not economically feasible. The benefit/cost ratio of it is .38 when all costs are discounted to present value over 50 years. The benefit/cost ratio for the combined project is .81. Axtell SSD is willing to pay half of the annual payment.

#### Otter Creek Reservoir Company and Piute Reservoir & Irrigation Company

Dennis Strong said both companies would like to have an accurate topographic map made of their reservoir basin while they are drained. The cost of this is estimated at \$25,000 each. This would increase their dam safety loans by \$25,000.

#### Deseret Irrigation Company

Steve Wilde said the company has constructed Phase I and Phase II of the proposed project using only the funds committed for Phase I. They are now requesting \$32,000 to construct Phase III instead of the original request of \$120,000.

#### West Porterville Pipeline Company

Mr. Wilde said the West Porterville Pipeline Company serves drinking water to ten connections. The pipe is leaky and contamination problems exist. Two connections east of the

creek and highway are residential and have problems receiving water for drinking. They have hauled water for two years. The company is requesting financial assistance to drill and equip two small culinary water wells to serve these two connections; they will no longer be served by the existing pipeline. Ivan Flint said it is a worthwhile project; the two homes will have a domestic well.

#### Flaming Gorge Water Rights

Dennis Strong discussed what is occurring with the Flaming Gorge Water Right extensions and what needs to be done. Three of the applicants need to prepare and submit a water conservation plan to the division by December 1 or they will automatically be dropped. Some of the applicants will be attending the Friday Board meeting.

#### Washington County Water Conservancy District

Mr. Strong said the Washington County Water Conservancy District is requesting the Board transfer the Crystal Creek water right to the District to allow the District to pursue a diversion from Crystal Creek to Kolob.

Meeting adjourned at 5:20 p.m.

*Unapproved*  
MINUTES OF THE  
BOARD OF WATER RESOURCES MEETING  
September 24, 2004

Bryce Canyon Conference Center  
Ruby's Inn  
Bryce, Utah

## TABLE OF CONTENTS

	<u>page</u>
SUMMARY OF BOARD ACTIONS .....	ii
THOSE PRESENT .....	iv
APPROVAL OF MINUTES .....	1
CHAIR’S REPORT .....	1
FEASIBILITY REPORTS	
#E-136 M&M Irrigation Company .....	1
#E-149 Willow Creek Irrigation Company .....	2
SPECIAL ITEMS	
#C-021 Otter Creek Reservoir Company .....	3
#C-022 Piute Reservoir and Irrigation Company .....	3
#E-101 Deseret Irrigation Company .....	4
#E-148 West Porterville Pipeline Company .....	4
Flaming Gorge Water Rights – Status Report .....	5
Washington County Water Conservancy District .....	6
CLOUD SEEDING .....	6
DIRECTOR’S REPORT .....	6
NEXT BOARD MEETING .....	7

## SUMMARY OF BOARD ACTIONS

1. The Minutes of the August 13, 2004 Board meetings were approved as prepared. page 1
2. The Board authorized the M&M Irrigation Company project in the amount of \$531,000 (37%) to be returned in 15 years at 0% interest with annual payments of \$27,000 the first five years and approximately \$39,600 the last ten years, subject to availability of funds. page 2
3. The Willow Creek Irrigation Company's proposed project was tabled. The company needs to address the Board with answers to the following questions/comments: (1) Is the agricultural benefit underestimated as the engineer claims? (2) What is the actual feasibility of the company purchasing Gunnison Irrigation Company shares and completing the required change applications? (3) The company's "Expired" status must be resolved. (4) Are the agricultural, municipal, and combined b/c ratios accurate in light of questions 1 & 2? (5) There needs to be more details in the company/district agreement and the agreement needs to be more "tied down". page 3
4. The Board committed an additional \$25,000 to the Otter Creek Reservoir Company. The company's contract will be amended to state the \$136,000 will be returned at 0% interest over approximately 12 years with annual payments of \$12,000 beginning in 2007. page 3
5. The Board committed an additional \$25,000 to the Piute Reservoir and Irrigation Company. The company's contract will be amended to state the \$442,500 will be returned at 0% interest over approximately 21 years with annual payments of \$22,000. page 4
6. The contract for the Deseret Irrigation Company was amended to provide an additional \$32,000 and to state the company will return the total \$120,000 in two years at 0% interest with annual payments of \$81,000 in 2008 and approximately \$39,000 in 2009. page 4
7. The Board authorized and committed funds to the West Porterville Pipeline Company project in the amount of \$27,000 (85%) to be returned with annual payments of \$2,000 at 0% interest over approximately 14 years. page 5
8. The Flaming Gorge Water Rights were extended to those requesting an extension, until July 1, 2006. Gunnison Butte Irrigation Company, Garfield County School District and Daggett County must provide a water conservation plan by December 1, 2004, before their water rights will be extended. page 5
9. The Board transferred the Crystal Creek water right to the Washington County Water Conservancy District. page 6

SUMMARY OF BOARD ACTIONS CONT'D:

10. The Board committed funds in the amount of \$150,000 from the Revolving Construction Fund to the Cloud Seeding program. page 6

## THOSE PRESENT

The Utah BOARD OF WATER RESOURCES met in regular session on Friday, September 24, 2004 at the Bryce Canyon Conference Center in Ruby's Inn, Bryce, Utah. Chair Shirley presided over the 8:30 a.m. meeting.

### BOARD MEMBERS PRESENT:

Harold Shirley  
Ivan Flint  
Bill Marcovecchio  
Brad Hancock  
Warren Peterson  
Paul Riley  
Paul McPherson  
George Harmond, Jr.

### STAFF MEMBERS PRESENT:

D. Larry Anderson, Director  
Dennis Strong, Deputy Director  
Eric Millis, Asst. Director  
Randy Staker, Accountant  
Steve Wilde, Chief, Investigations  
Ben Everitt, Chief, Geologist  
Tom Cox, Engineer  
Marisa Egbert, Engineer  
Geralee Murdock, Administrative Secretary

### OTHERS PRESENT:

Sherm Hoskins, Deputy Director, Department of Natural Resources  
Brian Allred, Policy Analyst, Legislative Research & General Counsel  
Terrah DeGiulio, Analyst, Governors Office of Planning and Budget  
Kerry Carpenter, Southwest Regional Engineer, Division of Water Rights

Frank Eliason, President, M&M Irrigation Company  
Troy Prestwich, Secretary-Treasurer, M&M Irrigation Co.  
John A. Syme, Watermaster, M&M Irrigation Co.  
Darin Robinson, Engineer, Jones & DeMille Engineering



OTHERS CONT'D:

A. Quay Mecham, President, Willow Creek Irrigation Co.  
Travis Blackburn, President, Axtell Special Service District  
Darrell Despain, Board member, Willow Creek Irrigation Co.  
Eric Franson, Franson Noble Engineering

Larry London, President, West Porterville Pipeine Co.

Myron Cottam, Superintendent, Garfield School District  
Connie L. Reid, President Boulder Farmstead Water  
Lenza Wilson, Mayor, Escalante City  
Greg Vetere, Gunnison Butte Irrigation Co.  
Tim Vetere, Farmer, Green River  
Randy Crozier, General Manager, Duchesne County Water Conservancy District

BOARD OF WATER RESOURCES  
MINUTES  
September 24, 2004

Chair Shirley welcomed everyone to the meeting

APPROVAL OF THE MINUTES

Bill Marcovecchio made the motion, seconded by Ivan Flint to approve the minutes of the August 13, 2004 meetings as prepared. The Board unanimously agreed.

CHAIR'S REPORT

Chair Shirley thanked everyone who participated in the successful tour of Garfield County the Board enjoyed on Thursday, September 23, 2004.

Larry Anderson informed the Board Dr. Ben Everitt would be retiring from the division at the end of October. He has served as chief geologist. Mr. Anderson wanted to acknowledge Ben's service and thank him for his 25 years with the division. He has been a great asset and will be missed a lot.

FEASIBILITY REPORTS

#E-136 M & M Irrigation Company

Chair Shirley introduced Frank Eliason, president; Troy Prestwich, secretary-treasurer; John Syme, water master; and Darin Robinson, engineer from Jones & DeMille. Steve Wilde reported the proposed project is located west of Mount Pleasant and northeast of Moroni in Sanpete County. The company diverts water from the Sanpitch River near Mt. Pleasant and delivers it for the pressurized irrigation of 1200 agricultural acres and 118 homes' lawns and gardens in Moroni. Water is diverted into an 11 mile-long, 20 cfs, unlined transmission canal. About 1,600 acre-feet of water is lost annually to seepage from a 7.5 mile, meandering section of the canal.

The irrigation company is requesting financial assistance to replace the 7.5 meandering miles of its transmission canal with 4.5 miles of 30-inch aluminized steel pipe. Technical assistance is being provided by Jones & DeMille Engineering in Richfield.

The estimated cost of the project is \$1.424 million. A Central Utah Water Conservancy District grant will provide \$893,000 or 63% of the amount. The Board is requested to provide 37%. Staff recommends the project be purchased in ten years at 0% interest with approximate annual payments of \$53,000. The company feels this would be burdensome and is requesting it

be purchased in twenty years as it will need to spend around \$120,000 over the next three or four years to get the land that has gone dry during the drought back into production.

Mr. Eliason thanked the Board for listening to their proposal, and said the company has had a 25-year relationship with the Board, and have always made their payments on time each year. He said the company has gone on past history as to what they have done and were able to do and that is the reason they requested the 20 year repayment period. Mr. Prestwich reiterated what Mr. Eliason said.

After considerable discussion, Warren Peterson suggested the repayment period be extended to fourteen years. Mr. Eliason said it would be better than ten years. Brad Hancock then suggested the purchase period be fifteen years to give them one more year to get the company on its feet. Warren Peterson made the motion to authorize the M&M Irrigation Company project in the amount of \$531,000 (37%) to be returned in fifteen years at 0% interest with annual payments of \$27,000 the first five years and approximately \$39,600 the last ten years, subject to availability of funds. Paul McPherson seconded the motion and the Board agreed unanimously.

#### #E-149 Willow Creek Irrigation Company

Chair Shirley introduced Quay Mecham, president; Darrell Despain, board member; Travis Blackburn, Axtell Special Service District president; and Eric Franson, engineer. Steve Wilde reported the company delivers ditch irrigation water to about 790 agricultural acres. Although in the past it has also delivered ditch water for 88 Axtell homes' lawn and garden use, many today use culinary water (supplied by Axtell Community Special Service District) outdoors instead. Irrigation water supplied from Willow Creek and Michaelson Springs; the springs are also Axtell's culinary water source. The irrigation company owns the right to the spring and has a perpetual agreement with the district allowing it to use up to a half second foot. Spring production has decreased during the past several years of drought.

The concrete-lined transmission ditch carrying diverted Willow Creek water down the canyon to places of use is deteriorated and requires constant maintenance.

The company is requesting financial assistance to construct a pressurized irrigation system to serve 1,200 acres of farmland, Axtell's existing 88 homes, and 29 additional homes projected to be constructed in the next 25 years. The project will include three miles of pipeline to transport irrigation water down the canyon, a regulating pond, and about eight miles of distribution pipeline. The benefit/cost (b/c.) ratio of the farm irrigation portion of the project is 1.12; the b/c. ratio for the municipal portion is .38, and the combined b/c. ratio is .81. Engineering services will be provided by Franson Noble Engineering in American Fork.

The project is estimated to cost \$1.233 million with the Board to provide \$1.048 million (85%) which would be returned in 25 years at 1% interest with annual payments ranging from approximately \$45,100 to \$50,600. It has been represented to staff that the district will assume half the annual payments to the Board; the company will work with the district in coming up

with the full payment to the Board each year. Among items the company will need to complete before the Board will consider committing funds are resolving its “Expired” status with the state Department of Commerce, and providing the Division a copy of the agreement the Company will have with the district guaranteeing the district’s portion of annual payments to the Board.

Mr. Blackburn of the special service district said the town has no more water hookups available as the culinary water is being used on lawns and gardens. This project would free up the culinary water as the whole town will be on a secondary system.

After considerable discussion, Warren Peterson made the motion to table the Willow Creek Irrigation Company’s request. The company needs to return to address the Board at one of its future meetings with answers/responses to the following questions/comments:

1. Is the agricultural benefit underestimated as the engineer claims?
2. What is the actual feasibility of the company purchasing Gunnison Irrigation Company shares and completing the required change applications?
3. The company’s “Expired” status must be resolved.
4. Are the agricultural, municipal, and combined b/c ratios accurate (in light of questions 1 and 2)?
5. Look closely at the nature/status of the company/district agreement. There needs to be more details and the agreement to be more “tied down”.

Paul Riley seconded the motion and the Board unanimously agreed.

## SPECIAL ITEMS

### #C-021 Otter Creek Reservoir Company

Dennis Strong reported the Board provided a \$2.109 million grant and a \$111,000 loan to upgrade Otter Creek Dam to meet current state dam safety standards. Work is complete but the company would like to map the reservoir basin so a new area-capacity curve can be developed. The reservoir is nearly empty and an accurate topographic map can be made. The cost is estimated to be \$25,000 which the company requests be added to the current loan.

Warren Peterson made the motion to commit funds in the amount of \$25,000 and amend the contract with the Otter Creek Reservoir Company to state the \$136,000 will be returned at 0% interest over approximately 12 years with annual payments of \$12,000 beginning in 2007. George Harmond, Jr. seconded the motion and the Board unanimously agreed.

### #C-022 Piute Reservoir & Irrigation Company

Dennis Strong reported the company has completed Phase I of the dam safety upgrade of Piute Dam. The Board has provided funds for Phases II and III, reconstructing the dam’s drainage system and constructing an emergency spillway. This work is under construction. The Board has provided a grant of almost \$8 million and a loan of \$417,500. With the reservoir almost empty the company would like to map the reservoir basin and prepare a new area-

capacity curve. The cost is estimated to be \$25,000, which the company requests be added to the current loan.

Warren Peterson made the motion to commit funds in the amount of \$25,000 and amend the contract with the Piute Reservoir and Irrigation Company to state the \$442,500 will be returned at 0% interest over approximately 21 years with annual payments of \$22,000. George Harmond, Jr. seconded the motion and the Board agreed unanimously.

#### #E-101 Deseret Irrigation Company

Tom Cox reported the Deseret Irrigation Company provides irrigation water to the areas around the communities of Deseret, Hinckley and southwestern Delta. Three years ago the Board authorized a \$900,000 multi-phase project to pipe approximately 12,000 feet of the South Hinckley Canal, and concrete-line approximately 9,500 feet of the Old Deseret Canal. The company piped about a mile of canal in 2001-02, and lined about 3,200 feet of canal in 2002. It is now ready to begin Phase III, piping the next 4,600 feet of the South Hinckley Canal at a total estimated cost of \$150,000; the proposed Board share is \$120,000 (80%).

Because the first two phases were both constructed under budget using only funds committed for the first phase, the company has all Board funds committed for Phase II (\$88,000) remaining. Therefore, it needs only an additional \$32,000 from the Board at this time to construct Phase III.

Warren Peterson said he was a shareholder in the company and would need to declare a conflict of interest. Bill Marcovecchio made the motion to amend the contract for the Deseret Irrigation Company to provide an additional \$32,000 from the Board and to state the company will return the total \$120,000 in two years at 0% interest with annual payments of \$81,000 in 2008 and approximately \$39,000 in 2009. George Harmond, Jr. seconded the motion and it was unanimously agreed upon by the Board. Warren Peterson abstained.

#### #E-148 West Porterville Pipeline Co.

Chair Shirley introduced Larry London, president of the company. Steve Wilde reported the pipeline company provides culinary water from Spring Hollow Spring to nine residential connections and a backup connection for a local church. Water from the spring is piped about 1.25 miles to a 17,000 gallon storage tank, then distributed to users. All connections except two are west of East Canyon Creek and State Highway 66, and also receive pressurized secondary irrigation water from West Porterville Irrigation Co.

The two connections east of the creek and highway are residential and are served by a pipeline with a number of leaks that cause reduced pressures and occasional water contamination. These two families have hauled water for drinking the past two years, but have used the piped water for all other indoor and outdoor uses. Their outdoor use of culinary water stresses the pipeline company's system.

The pipeline company is requesting financial assistance to drill and equip two small culinary water wells to serve the two connections across the creek and highway; they will no longer be served by the existing pipeline. This will eliminate the leaks and pressure and quality problems for the two communities, and the burden on the company's water system will be eased. Division staff will provide technical assistance.

The project is estimated to cost \$32,000. The sponsor has raised rates from \$120/year to \$300/year to pay for the proposed project.

Larry London said he appreciated Dan Aubrey's time and effort on this project. He said the company's been concerned for some years about the two hookups that are so far away, and feels the two wells will solve the problem.

Ivan Flint said he had looked at the project, and made the motion to authorize and commit funds to the West Porterville Pipeline Co. project in the amount of \$27,000 (85%) to be returned with annual payments of \$2,000 at 0% interest over approximately 14 years. Bill Marcovecchio seconded the motion and the Board agreed unanimously.

#### Flaming Gorge Water Rights – Status Report

Dennis Strong stated letters have been received requesting an extension of time for Flaming Gorge Water Rights. Staff has reviewed these requests and suggests the Board extend the deadline of submitting proof for two years until July 1, 2006. There are three exceptions – Daggett County, Gunnison Butte Irrigation Company and Garfield County School District; they have not submitted a water conservation plan. The water conservation plans must be submitted by December 1, 2004, or their Flaming Gorge Water Rights will be lapsed. These rights will then be returned to the Board and become part of the unallocated portion.

Kerry Carpenter, southwestern regional water rights engineer, explained the status of the entities in his region in regards to the Flaming Gorge Water Right. Chair Shirley then asked Myron Cottam, Garfield County School District; Lenza Wilson, mayor of Escalante City; Connie Reid, Boulder Farmstead Water; Greg and Tim Vetere, Gunnison Butte Irrigation Company and Randy Crozier, Duchesne County Water Conservancy District to comment regarding the status of their Flaming Gorge Water Right.

George Harmond Jr. made a disclosure that he had done work for Lee Thayne of Gunnison Butte Irrigation Company.

Brad Hancock made the motion to extend the Flaming Gorge Water Rights to those requesting an extension until July 1, 2006. Gunnison Butte Irrigation Company, Garfield County School District and Daggett County must provide a water conservation plan by December 1, 2004, before their water rights will be extended. Warren Peterson seconded the motion and the Board agreed unanimously.

### Washington County Water Conservancy District

Chair Shirley explained the Washington County Water Conservancy District has requested the Board give the deed to the Crystal Creek Water Right to it. Cedar City has relinquished all right to the claim and has given up any right for a transbasin transfer in that area.

Paul Riley made the motion for the Board to transfer the deed to Crystal Creek Water Right to the Washington County Water Conservancy District. Bill Marcovecchio seconded the motion and it was unanimously agreed upon by the Board.

### Cloud Seeding

Director Anderson said this is the time of year staff requests the Board to commit \$150,000 to the cloud seeding program. The Board has participated in this program for most of the last 25 years. The legislature has given the Board authorization to grant up to \$150,000 for cloud seeding out of the Revolving Construction Fund with a cost share not to exceed 50%.

Warren Peterson is affiliated with the Provo River Water Users Board and Bill Marcovecchio is affiliated with the Jordan River and Utah Lake Distribution Co., and both declared a conflict of interest.

Ivan Flint made the motion to commit funds to the cloud seeding program in the amount of \$150,000. Brad Hancock seconded the motion and the Board agreed unanimously. Warren Peterson and Bill Marcovecchio abstained.

### DIRECTOR'S REPORT

Director Anderson said the Upper Colorado River Commission met the previous week in a work group meeting in Denver trying to decide what to do if a drought continues. We have requested the Secretary of Interior to conduct a mid-year review of the Colorado River Annual Operating Plan. If the drought continues the Upper Basin States may ask the Secretary to reduce the releases from Lake Powell next year. The 7-Basin States are meeting separately to try and come to an agreement to reduce the releases from Lake Powell to the Lower Basin if the drought continues. Lake Powell is dropping and will continue to do so throughout the winter. Lake Powell is projected to be at elevation 3552 by March, 2005, which puts the lake down about 150 feet from full.

There have been two meetings with the Governor and Lt. Governor to talk about the Lake Powell Pipeline. Governor Walker needed information as she had a request from a group of state legislators from southwestern Utah to take a position on the Lake Powell Pipeline. The governor called a meeting with the legislators, water district officials, mayors and county commissioners

to talk about what could be done. After a long discussion it was determined the best thing that could happen was to try and figure out how to fund the construction of the Lake Powell Pipeline and the Bear River Development project. The governor agreed to put together a task force to study the funding issue. Ron Thompson was given the responsibility to come up with a group of names for the task force for southwestern Utah. Ivan Flint was given the responsibility of getting a group of names for the task force for northern Utah.

Director Anderson asked the Board members to have their picture taken before the November Board meeting as a new display is being created for the Division's conference room.

#### NEXT BOARD MEETING

The next Board meeting will be held Friday, November 5, 2004 at 1:00 p.m. in the Auditorium of the Department of Natural Resources Building. The Briefing Meeting will be held at 9:30 a.m. in Room 314.

Meeting adjourned at 11:35 a.m.



*Approved*  
MINUTES OF THE  
BOARD OF WATER RESOURCES  
BRIEFING MEETING  
August 13, 2004

Room 314  
Department of Natural Resources Building  
1594 West North Temple  
Salt Lake City, Utah

MINUTES OF THE  
BOARD OF WATER RESOURCES  
BRIEFING MEETING  
August 13, 2004

The Board of Water Resources held a Briefing Meeting on August 13, 2004 at 9:30 a.m. in Room 314 of the Department of Natural Resources Building, 1594 West North Temple, Salt Lake City, Utah.

The following were in attendance:

BOARD OF WATER RESOURCES

Harold Shirley  
Bill Marcovecchio  
George Harmond, Jr.  
Brad Hancock

STAFF MEMBERS:

D. Larry Anderson, Director  
Dennis Strong, Deputy Director  
Eric Millis, Asst. Director  
Steve Wilde, Chief Investigations  
Todd Adams, Chief, Hydrology and Computer Applications  
Geralee Murdock, Administrative Secretary

OTHERS PRESENT:

Terrah DeGiulio, Governor's Office of Planning and Budget Analyst

Board Chair, Harold Shirley welcomed everyone to the meeting.

## DIRECTOR'S REPORT

Director Anderson asked Eric Millis to give the Board an update on what the planning branch of the office has been doing. Eric Millis said there have been public meetings held recently, with an average attendance of 10-20 people, about the Weber Basin Plan. He said public comments should be received by the end of August or first week of September regarding the plan. The comments will be incorporated and the document will then be reviewed by the Board and staff one last time before it is sent to the printer.

Mr. Millis said the division is working with the department regarding federal Resource Management Plans in the Vernal, Price, Richfield and Monticello/Moab areas. The planning branch will also enter into an agreement with the Bureau of Reclamation to do a study in the Park City-Snyderville area looking at the future water needs in the area.

Planning is also involved with a water reuse study with Jordan Valley Water Conservancy District and other entities and will contribute money and information. Reports are being written for our own benefit on water reuse and aquifer storage and recovery, however, when we do basin planning it helps the local entities as we have information to give them.

The office has been asked to write up Performance Measures for the Legislature. Our fiscal analyst has asked that we do the types of things that are germane to our goals and mission – studies involving water conservation, progress with the development programs, state water planning, etc. They want a comparison of things we do over time such as the number of projects that actually get funded using the different financing methods the Board has adopted, the number of applications received, reports and studies done. Enough data will have been gathered on a number of studies we've been doing and we intend to make a presentation on them at the Utah Water Users Workshop in March.

Todd Adams passed out the current USGS "Groundwater Conditions in Utah" report. Mr. Adams said this is an historic ongoing project (since 1964) the division participates in with the USGS and the Division of Water Rights. Director Anderson asked if the wells were going down. Todd Adams said yes they are.

## DISCUSSION OF PROJECTS

### St. George and Washington Canal Company

Chair Shirley said this project would probably take several years to complete. It is a \$14 million project that will save approximately 4,400 acre-feet of water. The company has raised its assessment from \$18 to \$60 per share to help cover its portion of the cost. Mr. Wilde said this is a good project and needs to be done, as the canal is very flat. Harold Shirley said the company is working in cooperation with St. George City and the Washington County Water Conservancy District.

### Leeds Water Company

Steve Wilde said the company is requesting financial assistance to replace its two miles of open transmission ditch with 12-inch pipe and install five miles of pipe in the town of Leeds for pressure irrigation. People living in the Silver Reef area are concerned the transmission pipeline will dewater the ditch and affect the riparian habitat in their area. Staff feels this isn't any different than hundreds of other projects requesting open ditches be piped. The water company has the water right and most rights-of-way and legally has the right to do it.

After discussion the Board members felt this was a good project, however they would listen to the folks from Silver Reef express their concerns at the Board meeting.

### Center Creek Culinary Water Company

Mr. Wilde said the project was back for re-authorization; the company changed the scope of the project as it couldn't obtain a protection zone for a new spring and a larger tank was determined is needed. The company is now requesting financial assistance to redevelop its existing springs and construct a 300,000 gallon concrete storage tank, install three miles of distribution pipeline, purchase interest in a well being drilled and equipped by the LDS Church, and tie the well into the company water system. He said staff feels this is a good project.

### Hooper Irrigation Company

The company is asking for an additional \$85,000 in Phase I to provide lawn and garden water to serve two additional subdivisions.

### Holliday Water Company

The Holliday Water Company is requesting re-authorization as it determined that additional upgrades to the pipeline distribution system will benefit the company more than additional storage as was authorized. The proposed cost share of \$1.5 million will remain the same as the original authorization. The company is also requesting committal of funds.

## PRESENTATION ON THE DROUGHT

Director Anderson shared his presentation given to the NWRA conference in New Mexico on July 29 regarding the impact the drought has on the Colorado River Basin states.

## OTHER ITEMS

Harold Shirley reminded the Board of the September 23-24 Board meetings at Ruby's Inn.

Meeting adjourned at 11:45 a.m.

*Approved*  
MINUTES OF THE  
BOARD OF WATER RESOURCES MEETING  
August 13, 2004

Auditorium  
Department of Natural Resources  
1594 West North Temple  
Salt Lake City, Utah

## TABLE OF CONTENTS

	<u>page</u>
SUMMARY OF BOARD ACTIONS .....	ii
THOSE PRESENT .....	iii
APPROVAL OF THE MINUTES.....	1
CHAIR’S REPORT .....	1
FEASIBILITY REPORTS	
#E-129 St. George and Washington Canal Co.....	1
#E-132 Leeds Water Company .....	2
SPECIAL ITEMS	
#E-020 Center Creek Culinary Water Co. ....	3
#E-060 Hooper Irrigation Company .....	4
#E-122 Holliday Water Company .....	4
NEXT BOARD MEETINGS.....	5

## SUMMARY OF BOARD ACTIONS

1. The Minutes of the July 8 and 9, 2004 Board meetings were approved with suggested changes. page 1
2. The Board authorized the St. George and Washington Canal Company project in the amount of \$11 million (75%) to be returned in 30 years at 1% interest for the first fifteen years, 2% interest for the next eight, and 3% interest for the last seven. The annual payment will start at \$200,000 and increase up to 5.4% each year to a final payment of about \$920,000. page 2
3. The Leeds Water Company project was authorized in the amount of \$697,000 (85%) to be purchased at 0% interest over approximately 20 years with annual payments of \$35,000 through 2020 and \$38,000 from 2021 through the end of the purchase period. page 3
4. The Board reauthorized the Center Creek Culinary Water Company project in the amount of \$877,000 (75%) to be returned to the state in 30 years at 1% interest with an escalating repayment schedule. page 4
5. The Hooper Irrigation Company contract was amended to provide a total of \$4.802 million (85%) to be returned in 25 years at 3% interest with annual payments ranging from approximately \$205,000 to \$388,000. page 4
6. The Board reauthorized and committed funds to the Holliday Water Company in the amount of \$1.5 million (41%) to be returned in ten years at 5% interest with annual payments ranging from approximately \$177,000 to \$254,000. page 5

## THOSE PRESENT

The Utah BOARD OF WATER RESOURCES met in regular session on Friday, August 13, 2004, in the Auditorium of the Department of Natural Resources Building, 1594 West North Temple, Salt Lake City, Utah. Chair Shirley presided over the 1:00 p.m. meeting.

### BOARD MEMBERS PRESENT:

Harold Shirley  
Ivan Flint  
Bill Marcovecchio  
George Harmond, Jr.  
Brad Hancock

### STAFF MEMBERS PRESENT:

D. Larry Anderson, Director  
Dennis Strong, Deputy Director  
Eric Millis, Asst. Director  
Randy Staker, Accountant  
Todd Adams, Chief, Hydrology & Computer Applications  
Steve Wilde, Chief, Investigations  
Russell Hadley, Engineer  
Tom Cox, Engineer  
Shalaine DeBernardi, Engineer  
Gina Hirst, Engineer  
Geralee Murdock, Administrative Secretary

### OTHERS PRESENT:

Terrah DeGuiulio, Budget Analyst, Governor's Office of Planning & Budget  
Brian Baker, Asst. Vice President, Zions Bank Public Finance  
Mark Anderson, Asst. General Manager, Weber Basin Water Conservancy District

Ralph Staheli, President, St. George & Washington Canal Co.

Merrill Stirling, Board member, Leeds Water Company  
Brent Gardner, Alpha Engineering  
Frank B. Lojko, Silver Reef  
Gordon Beckstrand, Silver Reef  
Tim Apple, Facilities Manager, Church of Jesus Christ of Latter-day Saints



OTHERS PRESENT CONT'D:

Duane Sweat, President, Center Creek Culinary Water  
Dale Berg, Sowby & Berg Consultants

Robert W. Penman, President, Hooper Irrigation Co.  
Kurt Fowers, Director, Hooper Irrigation Co.

George Grover, President, Holliday Water Co.  
Marlin Sundberg, Manager, Holliday Water Co.  
Greg Loscher, Engineer, Bowen, Collins & Associates

MINUTES OF THE  
BOARD OF WATER RESOURCES MEETING  
August 13, 2004

Chair Shirley welcomed everyone to the meeting.

APPROVAL OF THE MINUTES

Bill Marcovecchio made the motion, seconded by George Harmond, Jr. to approve the minutes of the July 8, and 9, 2004 meetings with suggested changes. The Board agreed unanimously.

CHAIR'S REPORT

Chair Shirley reminded the Board of the tour to Garfield County September 23, 2004, and the Board meeting at Ruby's Inn on September 24, 2004.

FEASIBILITY REPORTS

#E-129 St. George and Washington Canal Co.

Chair Shirley introduced Ralph Staheli and Brent Gardner. Tom Cox reported the St. George and Washington Canal Co. delivers irrigation water to about 4800 acres; about 80-90% of the acreage is ag land and the rest is parks, schools, golf courses and residences. Water is diverted from the Virgin River about four miles downstream of Quail Creek Reservoir and flows through the nearly ten mile-long concrete-lined canal. The concrete is breaking up and the sponsor estimates that 10% of the canal water is lost to seepage. The canal has washed out several times the past few years and the sponsor is concerned with liability due to washouts and safety issues. Washington County Water Conservancy District (WCWCD) is considering constructing a reservoir about two miles upstream of the canal diversion within the next 20 years, which could provide the company opportunity for gravity pressurized sprinkle irrigation.

The company is requesting financial assistance to replace the canal's concrete-liner with 66 to 54-inch steel pipe. Alpha Engineering will provide technical assistance. The project is estimated to cost \$14.670 million. The company is considering assessing large shareholders (e.g. St. George City and WCWCD), and those with only a few shares, a higher fee. By doing so it can make the payments to the Board without excessively assessing agricultural users. This is equivalent to an average of \$60.61 per share; shareholders have been paying \$18 per share the past few years. Mr. Staheli said the company has been in the process of discussing this for the last two or three years.

Director Anderson asked if it would be okay to fund this project over three or four years as it is difficult to get the Board's cost sharing amount of \$11 million. Mr. Staheli said they could proceed with about 1/3 of the money if necessary.

Brad Hancock made the motion to authorize the St. George and Washington Canal Company project in the amount of \$11 million (75%) to be returned in 30 years at 1% interest for the first fifteen years, 2% interest for the next eight, and 3% interest for the last seven. The annual payment will start at \$200,000 and increase up to 5.4% each year to a final payment of about \$920,000. Ivan Flint seconded the motion and the Board agreed unanimously.

#### #E-132 Leeds Water Company

Chair Shirley introduced Merrill Stirling, board member; Brent Gardner, Alpha Engineering; Frank Lojko and Gordon Beckstrand, Silver Reef and Tim Apple of the L.D.S. Church. Tom Cox reported the Leeds Water Co. provides irrigation water to about 190 agricultural acres and 70 acres of lawns and gardens in and around Leeds. Water is diverted from Leeds Creek and flows just over two miles through an unlined transmission ditch to a small holding pond, then to town, and the majority of farmland. Over half the water is lost to seepage before it reaches the pond.

The company is requesting financial assistance to replace the two miles of transmission ditch with 12" pipe and install about five miles of 12-4" pipe in town to provide pressurized irrigation to stockholders. The cost estimate is \$820,000.

The ditch passes the historical Silver Reef area and several Silver Reef residents have voiced concerns over the effect of dewatering the ditch which will affect plants and animals that rely on its water. The Silver Reef residents would like to keep water in the ditch in some areas to mitigate some of the damages they feel will occur.

Mr. Stirling said there was an awful lot of water lost from the ditch. He said they do need to get money to take care of this big problem. Director Anderson asked Mr. Gardner if the town supports the project. Mr. Gardner said it does.

Director Anderson said staff had received a number of concerns from Silver Reef folks over taking the water out of the ditch. This information has been made available to the Board members. He then asked Mr. Lojko of Silver Reef if he would like to address the Board. Mr. Lojko showed the Board members pictures of the area and expressed to them the impact it would have on the area if the ditch were dewatered. He said the Silver Reef folks would like to meet with the Leeds Water Co. to see if some compromise could be met.

Bill Marcovecchio suggested the Silver Reef group purchase water shares so they would have some input to water company decisions. Mr. Lojko said Silver Reef folks were told there aren't water shares available for purchase. Ivan Flint said in his area there's a lot of farmland being developed and ditches that have been running forever have been piped without any question. The water company has the legal right to pipe the ditch as it has the water right.

Director Anderson said these gentlemen own homes in the Silver Reef area where the ditch runs through and has been running for about 100 years. It's developed a riparian area along the ditch. Their issue is they bought the homes in Silver Reef because this beautiful area existed; if the vegetation dies it would be a detriment to their community and to their land values. They're trying to express a concern in hopes something can be done to mitigate this.

Mr. Gordon Beckstrand of Silver Reef also expressed his concerns regarding the dewatering of the ditch and the hope that some compromise can be met.

After considerable discussion, Chairman Harold Shirley offered to meet with three members of the water company and three homeowners from Silver Reef to try and mediate the situation. He also requested Brent Gardner of Alpha Engineering be present. Director Anderson asked if this was acceptable to the group. They replied it was.

Bill Marcovecchio made the motion to authorize the Leeds Water Company project in the amount of \$697,000 (85%) to be purchased at 0% interest over approximately 20 years with annual payments of \$35,000 through 2020 and \$38,000 from 2021 through the end of the purchase period. George Harmond, Jr. seconded the motion and the Board agreed unanimously. Mr. Marcovecchio said the Board has mandated guidelines it goes by and have done so for years. He said there are always problems and some people are never happy with what goes on. He suggested Silver Reef residents purchase water shares and become part of the water company.

Director Anderson explained this project was for authorization only. The company will have to come before the Board with all the requirements filled before monies will be made available to them.

## SPECIAL ITEMS

### #E-020 Center Creek Culinary Water Co.

Chair Shirley welcomed Duane Sweat and Dale Berg. Steve Wilde reported the Center Creek Culinary Water Co. provides culinary water for indoor use to 72 connections. Water is supplied by two springs, flows by gravity to a 50,000 gallon concrete storage tank, and is then distributed to users through a 4 and 6-inch pipeline distribution system consisting of 40 year-old cast iron pipe which leaks and is too small to provide currently required fire flows. The storage tank is too small for fire protection storage and the springs don't flow enough to accommodate growth. The system is currently rated "Corrective Action" by the Division of Drinking Water because of failure to maintain minimum pressures throughout the system and inadequate storage capacity.

In early 2000 the Board authorized a project consisting of redeveloping and modernizing the company's existing springs, developing a new spring, installing three miles of spring transmission pipeline, and constructing a 250,000 gallon concrete tank. That project will now not be built in its entirety because the company couldn't obtain a protection zone for the new spring, and it determined a larger tank is needed.

The company is now requesting financial assistance to redevelop its existing springs, construct a 300,000 gallon concrete storage tank, install about three miles of ductile iron distribution pipeline, purchase interest in a well being drilled and equipped by the LDS Church, and tie the well into the company's culinary system. Technical assistance is being provided by Sowby & Berg Consultants in Heber City.

The project is estimated to cost \$1.170 million. Since there is not an alternative to the proposed project, benefits are assumed to equal costs; therefore the benefit/cost ratio is 1.0. The Board's water service affordability guidelines show the company's users can pay up to \$39.00 per month for all water. The cost of water with the proposed project, based on 72 connections, will be \$39.00/connection/month for the first five years; after that the Board's affordability amount will be exceeded as new connections added to the system and rise in median income are not expected to keep pace with the increased payments.

Mr. Sweat said they need the project very badly; there are a lot of leaks. Director Anderson asked if the changes in the system will add the extra pressure needed to get an "Approved" rating from the Division of Drinking Water. Mr. Sweat said yes.

George Harmond, Jr. made the motion to reauthorize the Center Creek Culinary Water Company project in the amount of \$877,000 (75%) to be returned to the state in 30 years at 1% interest with an escalating repayment schedule. Bill Marcovecchio seconded the motion and it was unanimously agreed upon by the Board.

#### #E-060 Hooper Irrigation Company

Chair Shirley introduced Robert Penman and Kurt Fowers of the company. Russell Hadley reported the Board authorized a four-phased pressurized irrigation system to serve agricultural and residential users. The project's first phase is nearing completion, however two additional subdivisions (43 residences) have expressed an interest in receiving lawn and garden water from Phase I which will require an additional 3,000 feet of 8 to 12-inch pipeline and 43 service connections. The company therefore requests the Board amend its current contract with it by committing an additional \$85,000 retaining the 25 year repayment period and 3% interest rate, and increasing annual payments to approximately \$205,000, escalating to \$388,000. Mr. Penman said these subdivisions are next to Roy City.

Ivan Flint made the motion to amend the Hooper Irrigation Company contract to provide a total of \$4.802 million (85%) to be returned in 25 years at 3% interest with annual payments ranging from approximately \$205,000 to \$388,000. Brad Hancock seconded the motion and the Board agreed unanimously.

#### #E-122 Holliday Water Company

Chair Shirley introduced George Grover, Marlin Sundberg and Greg Loscher. Gina Hirst reported the Board authorized a project for the company consisting of a three million gallon

concrete storage tank, 2 ½ miles of looping pipeline to and from storage tanks and wells, and a booster pumping station. That project will not be built because the company further analyzed water use and determined that additional upgrades to the pipeline distribution system will benefit it more than additional storage.

The company is now requesting financial assistance to replace 7 ½ miles of 4-inch ductile iron distribution pipe with 8-inch ductile iron distribution pipe, add valves and fire hydrants to the system, and replace old, galvanized steel service lines. Technical assistance is being provided by Bowen, Collins & Associates in Draper. The recommended Board cost sharing remains the same as previously authorized.

Mr. Grover stated the 4" line needed to be replaced in order to pass the fire code required by the county. Mr. Sundberg said the company has adopted a new rate schedule and raised its connection fees by 10%. Mr. Loscher said his engineering firm had recently been requested to develop a 5-year plan from a master plan prepared by another engineering firm. He said they re-prioritized the plan and decided that fire flow improvements should be addressed first before additional storage was needed; this is a much better use of the company's resources at this time.

Bill Marcovecchio made the motion to reauthorize and commit funds to the Holliday Water Company in the amount of \$1.5 million (41%) to be returned in ten years at 5% interest with annual payments ranging from approximately \$177,000 to \$254,000. It was unanimously agreed upon by the Board.

#### NEXT BOARD MEETINGS

The next Board meetings will be held at Ruby's Inn with a tour and briefing meeting on September 23, 2004 and a Board meeting, September 24, 2004.

Meeting adjourned at 2:55 p.m.

